

IN THE CLAIMS:

Please cancel claims 1-7, 12, 14 and 20 and insert the following new claims:

21. (new) A method for generating a hepatic cell culture comprising:

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co-culturing hepatocytes and nonparenchymal cells derived from
disaggregated liver tissue, in the presence of

(a) one or more growth factors that support the growth of
hepatocytes and

(b) a matrix wherein said matrix is a bead coated with at least one
biologically active molecule that promotes cell adhesion

under conditions sufficient to allow for the proliferation of said hepatocytes while
retaining hepatic function of said hepatocytes.

22. (new) A method for generating a hepatic cell culture comprising:

established hepatic cell lines comprising hepatocytes and non-
parenchymal cells, in the presence of

(a) one or more growth factors that support the growth of
hepatocytes and

(b) a matrix wherein said matrix is a bead coated with at least one
biologically active molecule that promotes cell adhesion

under conditions sufficient to allow for the proliferation of said hepatocytes while
retaining hepatic function of said hepatocytes.

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23. (new) The method of claim 21 or 22 wherein the matrix is in the form of polystyrene beads.

24. (new) The method of claim 21 or 22 wherein the matrix is coated with an extracellular matrix protein.

25. (new) The method of claim 21 or 22 wherein the matrix is coated with type I collagen.

26. (new) The method of claim 21 or 22 wherein the growth factor is epidermal growth factor.

27. (new) The method of claim 21 or 22 wherein the growth factor is hepatocyte growth factor.

28. (new) A population of hepatocytes and nonparenchymal cells, derived using a method comprising:

co-culturing hepatocytes and nonparenchymal cells derived from disaggregated liver tissue, in the presence of

(a) one or more growth factors that support the growth of hepatocytes and

(b) a matrix wherein said matrix is a bead coated with at least one biologically active molecule that promotes cell adhesion

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under conditions sufficient to allow for the proliferation of said hepatocytes while retaining hepatic function of said hepatocytes.

29. (new) A population of hepatocytes and nonparenchymal cells, derived from a method comprising:

co-culturing established hepatic cell lines comprising hepatocytes and non-parenchymal cells, in the presence of

(a) one or more growth factors that support the growth of hepatocytes and

(b) a matrix wherein said matrix is a bead coated with at least one biologically active molecule that promotes cell adhesion

under conditions sufficient to allow for the proliferation of said hepatocytes while retaining hepatic function of said hepatocytes.--

REMARKS

Claims 1-7, 12, 14 and 20 are pending in the application. Claims 1, 2, 4-7, 12, 14 and 20 are rejected under 35 U.S.C. §103(a). Applicants wish to thank the Examiner for taking the time to conduct an interview on May 16, 2003. During the interview, the prior art references cited by the Examiner were discussed. Applicants have amended the claims as suggested by the Examiner.

Entry of the foregoing amendments and remarks into the file of the above-identified application is respectfully requested. Applicants believe that the invention described and defined by the amended claims is patentable over the rejections of the